Simulation and Design Optimization of TWT's
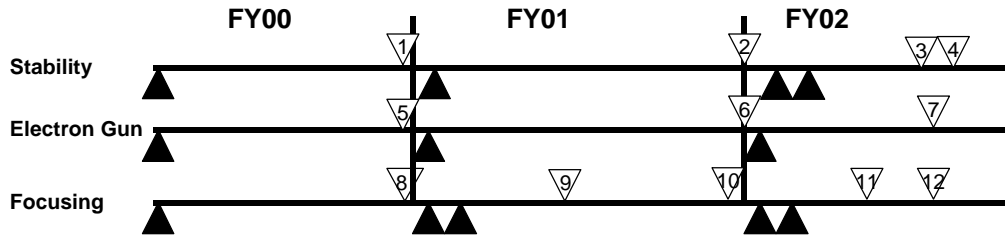# Product Development Schedule and Milestones:

Subtask	Milestone No.	Description	Date
Enhance Stability	1	Analysis of Beam/RF in Helical TWT (CK)	4Q00
" "	2	Analysis of Sever and Coupler Matching (CK)	4Q01
" "	3	Design Procedure for Oscillation Prevention (CK)	3Q02
" "	4	Design Procedure for Intermodulation Reduction (KV,CK)	3Q02
Design Electron Gun	5	Analysis of Electron Emission (JF)	4Q00
" "	6	Determination of Tolerance Effects (JF)	4Q01
" "	7	Electron Gun Design Procedures (JF)	3Q02
Improve Focusing	8	Analysis of PPM Focusing Assymetries (CK)	4Q00
" "	9	Investigation of NdFeB magnets for TWT's (DF)	2Q01
" "	10	Design Procedure for Reliable PPM Focusing (CK)	4Q01
" "	11	Investigation of Methods to Improve Uniformity (DF)	2Q02
" "	12	Investigation of Electrostatic Focusing (DF)	3Q02
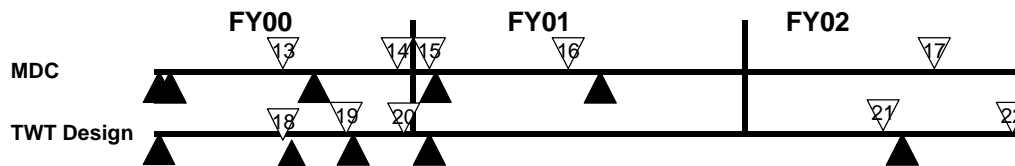
Subtask	Milestone No.	Description	Date
Improve Collector	13	Analysis of Magnetically Focused Collector (DF)	2Q00
" "	14	Design Procedures for Geometrical Assymetries (KV)	4Q00
" "	15	Investigation of Laser Textured Surfaces (DF)	4Q00
" "	16	Automated MDC Design (KV, JW)	2Q01
" "	17	Design Procedures for Magnetic Assymetries (KV)	3Q02
Design 100-W TWT	18	Design Algorithm for Increased Bandwidth (JW)	2Q00
" "	19	Model Development for Helix TWT's (JW)	3Q00
" "	20	Design of Baseline TWT (JW)	4Q00
" "	21	Design Procedure for Optimal Data Rate (JW)	2Q02
" "	22	Final Optimized TWT Design (JW)	4Q02